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fortunate in this respect. Tepoztlán is just above the malaria area, and although some malaria occurs it is generally contracted by Tepoztecans who have been working in the lowlands. The climate of Tepoztlán is one of the most healthful in the state of Morelos, and Tepoztlán has one of the lowest death rates in the state.

The average annual temperature for the village is about 65° F. However, there are marked daily and seasonal variations. In the rainy season mornings are usually humid and cool but by midday the temperature is up to 65°. The evenings are cool. During the months of November, December, and January the nights and early mornings are much colder, and the temperature drops to 35° to 40°. The cold works hardships on the people because of the lack of warm clothing. However, even during these months the temperature rises to 65° and 70° by midday. At no time does the temperature rise above 80°. While it gets hot in the open fields under the sun, it is generally comfortable in the village because of the many shade trees on almost every house site. The daily variations in temperature and humidity are partially responsible for the high frequency of rheumatic complaints and respiratory diseases.

The rainy season begins toward the end of May or early June and generally lasts to mid-October.[1] The average annual rainfall in the village is about 60 inches, most of which comes during the five months from June to October. In June and July the rains generally come in the afternoon and last for a few hours. During these months the working day in the fields ends at about 2:00 P.M. In August and September the rains generally begin later in the afternoon and frequently last through the night. However, there is much variation within this general pattern. Although droughts are not uncommon, excessive rainfall is the more common complaint. Sometimes Tepoztecans cannot cultivate their crops with plow and oxen because of the mud.

The crucial months for the corn crop are August and September when the ears of corn are filling out. The occasional lack of rain during these months is attributed by some of the older folks to the failure of the dancers, at the fiesta in honor of the deity El Tepozteco, to carry out correctly the traditional ceremonies. The coexistence of pagan and Catholic elements in beliefs concerning rain is shown by the fact that the saints of the central church, as well as those of the barrios, are taken in procession through the village to pray for rain when necessary. Hailstorms occur in the rainy season but they are generally brief. It is a common belief among Tepoztecans that the setting off of firecrackers or the shooting of guns will stop the hail.

The dry season begins in October or November and lasts for seven long months. The earth becomes parched and many of the semi-deciduous trees lose their leaves. Water must be hauled in greater quantities for the animals, the flowers, and the young trees on the house sites. Winds from the north cause small dust storms in the village and sometimes damage the ripening corn. Respiratory diseases are more frequent during this time of the year. Because of the dry season, only one crop a

[1] See Redfield, *Tepoztlán*, p. 121, for description of the rains.

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slightly less than 10 per cent while the national figures are about 15 per cent. The fact that there are relatively few people in Tepoztlán between the ages from 20 to 30 reflects the high mortality rate in Tepoztlán during the years of the Revolution.

Another interesting difference is the much larger percentage of people over age 50 in Tepoztlán, 15.5 per cent for Tepoztlán as compared with 9.9 per cent for rural Mexico. In 1940 there were 95 individuals over age 70 and 39 individuals over 80. The longer age span in Tepoztlán is even more striking when compared with a Tarascan village like Tzintzuntzan, where only one person over 80 was reported.[88] I believe this is related to the relatively higher standard of living in Tepoztlán and to its healthful climate.

BIRTH AND MORTALITY RATES

The birth rates and death rates are shown in Tables 6 and 7.

TABLE 6. Birth Rate, from 1930 to 1940.

Year	Births per 1,000 Inhabitants
1930	43.8
1931	61.0
1932	64.8
1933	61.6
1934	54.7
1935	51.1
1936	37.2
1937	47.3
1938	41.5
1939	47.0
1940	41.3

TABLE 7. Mortality Rate, from 1930 to 1940.*

Year	Total Deaths	Mortality by Age		Infant Mortality (Deaths per 1,000 Live Births)	General Mortality
		Less than 1 year	More than 1 year		
1930	105	41	64	198.1	22.2
1931	132	40	92	134.7	27.1
1932	81	21	60	64.8	16.2
1933	133	27	106	85.4	25.9
1934	97	25	72	86.8	18.4
1935	89	23	66	83.3	16.5
1936	71	21	50	101.9	12.8
1937	88	22	66	82.1	15.5
1938	66	15	53	62.2	11.7
1939	130	18	112	64.5	21.9
1940	85	15	70	59.8	14.0

* Based on data from the Departamento de Estadística, Mexico, D.F.

It can be seen from Table 6 that the average birth rate for the eleven-year period from 1930 to 1940, inclusive, was 55.1 per cent. This is considerably higher

[88] See George M. Foster, *Empire's Children: The People of Tzintzuntzan* (México: Imprenta Nuevo Mundo, 1948), p. 29.

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than the national average of 48.6 for the same period. It should be noted, however, that the birth rate varies considerably from year to year. The data in Tables 6 and 7 were obtained from the Federal Department of Statistics in Mexico City, which in turn gets its data from the municipal registry in Tepoztlán. To check on the reliability of these data I examined the local registry for the five-year period from 1939 to 1943. I found that not all births are recorded, and that many births are recorded years after the event. For example, three births which had taken place in 1926 were included in the record for 1941. Out of 284 births recorded in the register of 1939, 45 were born in other years; 42 out of 251 in 1940; 63 out of 245 in 1941; 68 out of 299 in 1942; and 64 out of 245 in 1943. In other words, of 1,324 births recorded during this five-year period, 282 were not born in the year in which they were recorded. It should be noted, however, that most of the cases were only one year late. And the fact that the procedure of including births from other years is a regular one tends to reduce the margin of error. Thus, while these statistics leave much to be desired, they do indicate general trends.

The average rate of infant mortality for the eleven-year period 1930 to 1940, inclusive, was 102.3 and the general mortality for the same period was 20.2. While both figures are high when compared with death rates in rural areas in the United States, it must be noted that they are considerably lower than the figures for the state of Morelos as a whole, for which the comparable figures were 133.6 and 30.2, respectively. The general mortality rates for the 31 municipios of the state of Morelos shows the municipio of Tepoztlán to be in the lowest quartile, third from the bottom, again indicating the relatively healthful location of the village. Furthermore, the infant mortality rate for Tepoztlán was also lower than for rural Mexico, which was 121 for the five-year period 1939 to 1943, inclusive.[37]

The mortality figures, like the birth figures, show a marked variation from year to year. However, the general trend for Tepoztlán was toward a sharp lowering of the mortality rate, especially in the case of infant mortality, witness the drop from 198.1 of 1930 to 59.8 in 1940. How can we explain this trend?

Probably the most important factor in the decrease of the infant mortality rate has been the increase in and greater availability of medical services. Tepoztlán has received a good deal of attention from the Mexican Department of Health, which has carried out a fairly intensive program of inoculation. While the health officials have not succeeded in eliminating the sources of infection and epidemics in the village—witness the serious typhoid epidemic in 1940, and the measles epidemic of 1947 which killed off many children—they have taken energetic measures to control the epidemics.

Since 1930 there have been doctors residing temporarily in Tepoztlán for short periods.[38] There have been at least two *pasantes* (graduate medical students) who,

[37] Whetten, *Rural Mexico*, p. 328.

[38] From the doctors' reports on file at the Department of Health in Mexico City, it appears that rheumatism is the most frequent disease and accounted for 50 per cent of all illnesses treated. Next in frequency was benign goiter, followed by tuberculosis and enteritis.

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in accord with government regulations, must spend a six-month training period in the field to qualify for the medical degree. In addition, some Tepoztecans visit private doctors and the free health clinic in Cuernavaca. The presence of five midwives with some training in modern hygienic methods is also to be noted. Finally, the trend toward a lower general mortality rate may be related to the steadily increasing standard of living in the village. As will be seen later, the consumption of meat, eggs, milk, and bread has risen considerably over the last twenty years.

In Table 8 is presented the average mortality rate by age groups for the entire municipio of Tepoztlán over a twelve-year period from 1930 to 1941, inclusive.

TABLE 8. Average Mortality Rate by Age Group, from 1930 to 1941, Inclusive.

Age Group	Mortality Rate
Less than 1 year	96.94
1-4	44.24
5-9	7.24
10-14	10.31
15-19	11.22
20-39	5.60
40-59	15.75
60 and over	56.80

These figures show that the age of lowest mortality rate in Tepoztlán is from twenty to thirty-nine. The death rate from forty to fifty-nine, though increased, is not unusually high, indicating that many individuals live to a fairly ripe old age.

LANGUAGE AND LITERACY

Two languages are spoken in Tepoztlán, Spanish and the indigenous Náhuatl. Twenty years ago when Redfield was there, nearly all the inhabitants spoke Náhuatl. Since that time there has been a marked decrease in the use of Náhuatl and a corresponding increase in the use of Spanish. The data in Table 9, based on the Federal Census of 1930 and 1940, indicate this trend.

TABLE 9. Languages Spoken in the Municipio and Tepoztlán

Languages	Municipio		Tepoztlán
	1930	1940	1940
Spanish	14%	40%	52%
Náhuatl	4	5	1
Spanish and Náhuatl	82	55	47

Although about one-half of all Tepoztecans are still bilingual, the drop from 82 to 55 per cent for the municipio and to 47 per cent for Tepoztlán proper is striking. The decrease of those who speak only Náhuatl in the entire municipio was from 144 individuals in 1930 to 29 in 1940. In 1944 there were five persons in Tepoztlán who spoke only Náhuatl. The significance of this trend is unmistakable. It would be safe to predict that within the next few generations the number of bilingual persons will become negligible.

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pression that most church weddings in Tepoztlán are of the second type, that is, *con ceremonia*. Judging from the marriage statistics, there is an average of about twenty-five church weddings a year. Assuming that twelve are of the elaborate type and thirteen of the simple type, we get an income of 426 pesos a year.

Another source of income is from the ceremonies at death and burial. The simple benediction for a dead child costs five pesos; benediction with *vigilias* costs thirty pesos; for going to the home of the deceased and praying, and then saying a Mass in the church and later at the cemetery, the cost is forty pesos.

The number of deaths in the municipio over a six-year period was 101, one-fourth of which was infant mortality. From this data we can calculate the church income. There is considerable variation in the costs of funerals. Often the rich will take only the simplest ceremony, while the poor will go into debt for an elaborate funeral. We can assume that about 60 per cent of the adult deaths yielded an income of at least 30 pesos to the church and the rest yielded about 40 pesos. We therefore get the following:

25 Benedictions for infants at 5 pesos each	125
46 Benedictions and Masses for adults at 30 pesos each	1,380
30 Benedictions and Masses for adults at 40 pesos each	1,200
Total	2,705

GENERAL MASSES

Here we can consider the Mass said in memory of the dead once a year; those paid by the religious associations in the village; and Masses said on Sundays and fiesta days.

It is customary to have a Mass said on the anniversary of the death of a close relative for at least two years, and some continue for much longer. Thus, given 101 deaths a year we can assume that at least eighty per cent will have Masses said the first year, sixty per cent the second year, and thirty per cent the third year. This would mean 180 Masses a year. These Masses have three prices: simple Mass for 2 pesos, a sung Mass for 11 pesos, and a Mass with a sermon for 40 pesos. The priest encourages the people to have Mass said for their dead and points out that the more elaborate the ceremony, the better the dead will fare in purgatory. Even the poor try to have the most elaborate Mass. Still, we will assume that at least 50 per cent of the Masses for the dead are simple, about 25 per cent are sung, and 25 per cent include a sermon. This yields the following income:

90 Masses at 2 pesos each	180
45 Masses at 11 pesos each	495
45 Masses at 40 pesos each	1,800
Total	2,475

In addition, we must add the money collected by the priest on the Days of the Dead when he says Mass for the dead as a whole, but mentions in particular the names of those who pay a three-peso fee. Informants believe he receives about 400

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There is a belief that if an eclipse occurs during a woman's pregnancy, the child will be born with some part of his body missing; that is, it will have been eaten by the moon. To prevent this the mother should wear a pair of scissors under her sash. An earthquake will also cause some physical defect in the child.

There are no diet restrictions for pregnant women. There is a widespread belief that the pregnant woman should satisfy any food whim, otherwise she may suffer a miscarriage or a premature birth, or the baby may be born with skin colorations. Many subsequent difficulties are assigned to the failure to satisfy food whims. It is the husband's obligation to provide his wife with the food she wishes. But women do not make frequent or unreasonable demands, particularly if their husbands are not "good" to them.

Women who are nauseated during the second and third months are treated with herbs which are said to decrease the water in the abdomen. Many women do not take this treatment because of the restriction in diet and movement that follows. They may not go out into the street for three days, they may not go to the fields or to the stream, they may not stand near a water jug.

There are no restrictions on sexual intercourse during pregnancy, and many continue to have intercourse up to the time of birth. No special positions are used in the last months to protect the fetus.

When there are signs of miscarriage, the midwife tries several remedies. The patient may be asked to recline on a *rebozo* or cloth and is then moved or jerked two or three times from one side to another by means of the cloth. Another remedy is to soak an old tortilla in water of *nixtamal* or vinegar and place it on the small of the back. A mixture of the following herbs is also used: *tlatlazcametl*,[6] *camotito de San Diego*,[7] and *muicle*.[8] To this some midwives add wine, chocolate, leaves of *Santa María* (*artemisa*),[9] and a gold earring to be boiled with the mixture. Miscarriages are not frequent, and when one occurs the woman is often blamed for bringing it about by carelessness.

Induced miscarriages are fairly common. But the frequent deaths in such cases deter most women, and it is said that women who try to "cure" themselves will have to account for their behavior on Judgment Day. Miscarriages are said to cause *paños* or brown discoloration of the skin, so that women who suffer from this are believed to have aborted frequently. To bring on delayed menstruation, many women drink *muicle*. Ground *chayotillos* with salt may be taken, or a tuber *aboyote* may be used. Another way is to use the same preparation which brings on labor. The ingredients are as follows: opossum tail (*tlacuache*), *pimienta gorda*, *sasalik*, and *tlatlatzcametl*. Sometimes women will bring about a miscarriage by deliberately lifting heavy objects. Many women, and particularly unmarried girls, secretly go to

[6] *Montanoa tomentosa*, a very well-known plant. See Maximiano Martínez, *Las Plantas Medicinales de México* (México, D. F.: México Ediciones Botas, 1939), p. 330.

[7] Unidentified.

[8] *Jacobinia spicigera*, *ibid.*

[9] Unidentified.

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is "clean," that is, when bleeding stops. This sometimes occurs in the first week but more often in the second. After delivery it is obligatory to give the midwife something to eat as an expression of appreciation, but it is up to the family to decide what is given. Generally the midwife is offered chocolate or coffee and bread. Sometimes wine and cigarettes are also given. During and after the delivery, the midwife is not restricted in any way as to the food she may eat.[18]

The mother's milk generally flows after one or two days, sometimes even before the birth. If the milk does not appear by the second day, some midwives give the mother an *atole* of sesame seed, chick peas, chocolate, and cinnamon. Others give *necuatole* or *atole de alegría* made of ground corn, *chile pasilla*, *epazote*, and brown sugar. Another remedy is the penis of an ox, cut up and cooked. Sometimes the *flor de pascua* is boiled and taken by the mother. A few midwives place the baby at the mother's breast to stimulate the flow of milk. Many babies are nursed at another woman's breast until the mother's milk comes. During the day the wet nurse, usually a relative or a friend, comes to the child's house every three or four hours to nurse him. At night the child is taken to the wet nurse once or twice by the father or grandmother. There is no charge for the services of the wet nurse, but often the child's family sends her some meat to nourish her during this time. Some families are afraid to take a young infant out because of *los aires*, and it is fed cinnamon and water until the mother's milk begins to flow.

It is a common belief that the first milk is harmful to the infant and should be discarded. It is squeezed out and either thrown to the ground (this is called *motlalioka*, burying the first milk), or it is thrown over the roof (*monokia*) to prevent the mother's milk from going away. It is also thought that squeezing out the first milk hastens the flow of the true milk. If the mother has no milk, it is considered a calamity because the cost of a regular wet nurse is prohibitive, and many children die when put on a diet of cow's milk. Canned milk is now used safely but the expense is a heavy burden for most families.

The amount of attention and care given to the new mother in Tepoztlán is striking. At no other time are women accorded so much service and time for rest. This care consists of a prolonged period in bed, freedom from household duties, taking sweatbaths, and abstention from sexual intercourse.

The prime motive underlying this postnatal care is to delay a new pregnancy as long as possible. It is believed that early resumption of sexual intercourse causes the back to weaken and the menstrual flow to begin, thus making conception more probable. Women say that extended rest from work and sexual intercourse can

[18] We could find nothing to support Redfield's statements that "The midwife is magician-priest rather than obstetrician; she eats the same food as her patient as long as their relation of intimacy is maintained during postnatal care . . . during the first week, the new mother and the midwife, who must eat the same food as her patient, observe food restrictions." *Ibid.*, pp. 134, 136. Our questions concerning this called forth the same response from informants in Mitla: that is, they laughed at the thought and denied that it occurred. It should be noted that Redfield's account of the above, as well as other aspects of pregnancy and birth, is based on the report of a single informant and probably represents an individual variation.

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Most families attempt to console the child during weaning. He generally receives more attention from his mother and continues to sleep with her. However, most mothers do not carry the child during weaning because of the pain in their breasts. The child is generally carried about by others in the family, is given little toys or goodies, and is taken visiting. The child starts to eat with the family, and this is often presented to him as a compensation for the loss of the mother's milk and usually serves to divert him. Occasionally, if a child is inconsolable and cries hard for a long time, particularly at night, the mother, or more usually the father, will lose patience and spank him hard and then frighten him into silence by telling him the coyote will come to eat him. Sometimes a child will be taken to sleep at his grandmother's house for a few nights.

Illness and death are frequent in children after weaning. Often the illness or death is attributed to indigestion or *ético* (tuberculosis?), in which the child wastes away. These are associated with the changed diet of the child at weaning, and it is highly probable that these children do not receive sufficient nourishment, or are given foods unsuited to the digestive systems of young children. Many women wean *con pura tortilla*, that is, with inadequate food substitutes. These children are shifted to the diet of the adult, which consists of tortilla, beans or bean soup, rice or noodles prepared with much lard or oil, and black coffee. In some families children of two are also permitted to eat chile and various local seeds which, whether toasted or raw, are difficult to digest. The best traditional method of feeding a weaned child is to give him an *atole* of ground corn cooked in milk, if the family can afford it, or in water, and sweetened with cinnamon and brown sugar. Many women say that children never become ill if given this food daily for one, two, or six months after weaning. Today better-to-do and more acculturated families wean with a daily diet of eggs, cereals, milk, soups made of chicken or meat, and vegetables and fruit, in addition to the traditional foods. Sometimes cooked meat and bread are given to a small child, even when the rest of the family cannot afford to eat them. This diet, however, is limited to very few children.

Chipilez, or jealousy, is an important childhood illness which begins when the mother of the child again becomes pregnant.[8] The world *chipil* (jealous) is derived from the Náhuatl *tzipitl* which means last or smallest one and refers to the jealousy of the youngest child toward the expected baby. It is believed that nursing children can tell from the taste of the pregnant mother's milk that a new child is coming, and the illness is due to the fact that they are now "carrying the weight of the baby," a euphemistic term for jealousy. Weaning is begun with the first display of symptoms. Children who are no longer being nursed but who still sleep with the mother are able to "sense" the coming of another child and may also become *chipil*. Young husbands are also subject to *chipilez* when their wives become pregnant for the first time. They also are "carrying the weight of the baby," since there is no other child to do so. The symptoms of *chipilez* are pain all over the

[8] This illness is well known in many parts of Mexico, including the large cities, but, to my knowledge, it has not been reported in anthropological literature.

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[redacted]iarrhea, loss of appetite and weight, pallor, and weakness. In fact, almost any symptom or illness during this time is called *chipilez*. It is said that husbands become sleepy and do not want to work. A husband can be cured by wearing a strip of his wife's skirt around his neck.

In the case of children, there is no known cure, and mothers try to comfort the child with more attention. Grandmothers often advise against too much kissing and embracing of the child when he is *chipil* because it "makes the burden heavier." Indeed, the greater attention required by the sick child makes more difficult his later adjustment to the withdrawal of the mother at the birth of the next baby. It is said by some that if a child is very *chipil*, the next baby will be of the opposite sex, and if the child is not very ill, the next baby will be of the same sex.

Sometimes a *chipil* child dies before the birth of the next child, and several families attribute as many as four or five deaths of children to *chipilez*. From the symptoms and number of deaths, and from the obvious relation to weaning, it is highly probable that many cases of *chipilez* are due to nutritional deficiencies or intestinal parasites. Most children and all husbands recover at the birth of the new baby, for, it is said, "Tlayish qua mak awa," (the weight is lifted).

EARLY CHILDHOOD

[redacted]ne transition from infancy to childhood is characterized by the breaking of the close ties between the mother and the youngest child. This process begins at weaning and generally culminates with the birth of the next sibling. As we have seen, in this interval of from two to four months, most children become *chipil*, losing their symptoms after the birth of the baby. Other children continue to be ill, sometimes for several months or even years. This illness reflects the widespread sibling rivalry which exists among children.

Children in Tepoztlán are not prepared for the arrival of a new sibling. When delivery is expected, the children of the house are sent to sleep with the grandmother or a relative or neighbor. When they return home the next morning they are told their parents have bought a new baby, and they are shown their new brother or sister. The initial reaction of the children may be one of pleasure, curiosity, or apprehension, the latter particularly on the part of the younger children. Older girls often express displeasure, and some even scold their mothers for buying a new child because the burden of raising it usually falls upon them. A girl of thirteen said to her mother after the birth of another child, "You cannot even buy us good food or shoes. Why did you buy another child?"

Jealousy and hostility on the part of the other children, particularly the younger ones, are so common as to be considered inevitable and normal. Children often call the baby names and, if not watched, may slap, pinch, or throw him on the ground. Small children, too, scold their mother for buying the infant and beg her to return him. A mother said that her four-year-old son used to stand at the gate and call to passers-by to take away his little sister. Jealous children are often regarded with amusement by adults, but striking the infant or mother in jealousy is quickly